HS3 Data Catalog

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Roadmap

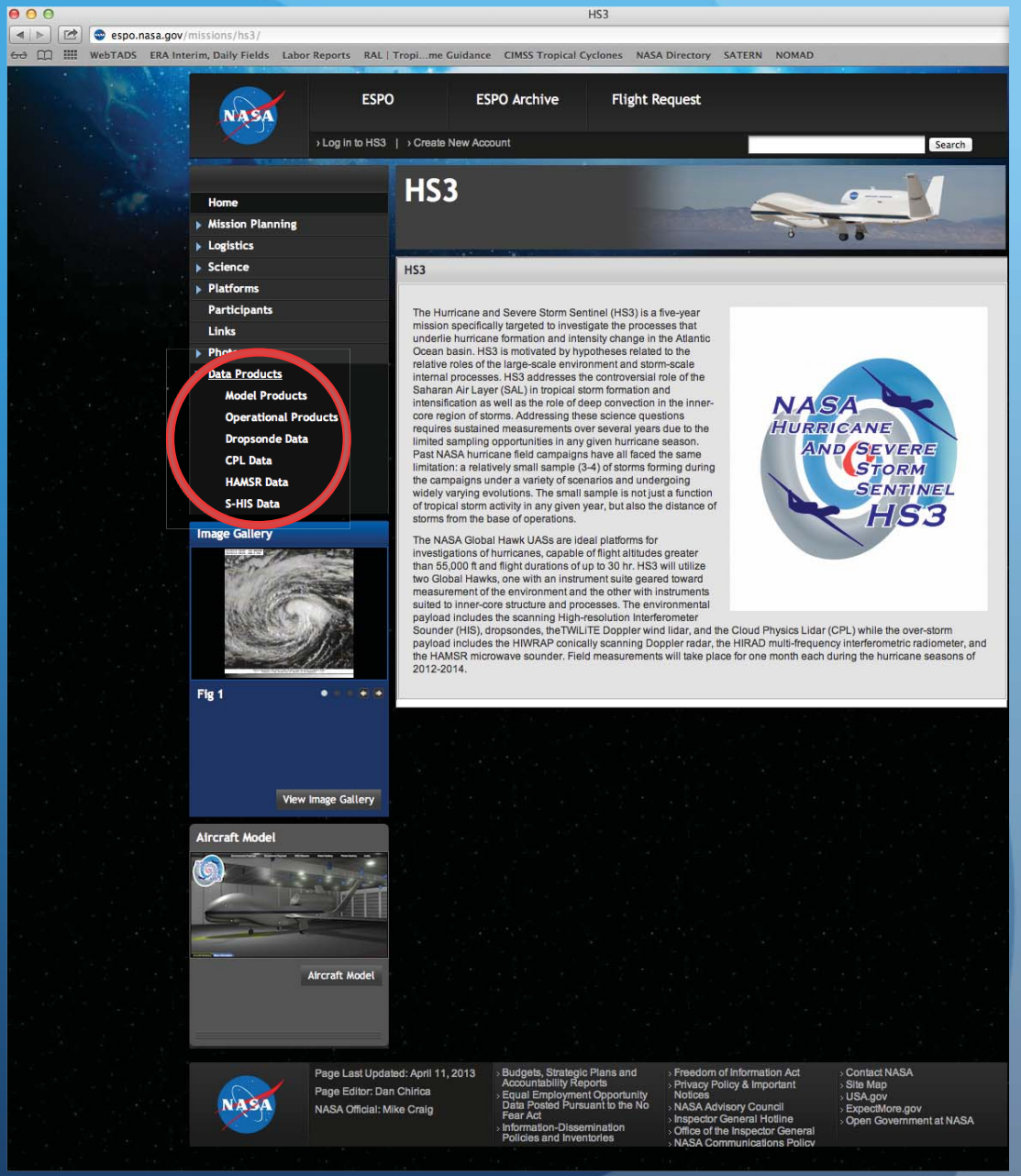
- What we planned
- What we did
  - Model Products: Examples from GMAO, NRL COAMPS TC, and SHIPS
  - Operational Products: Examples from NRL Tropics and CIMSS Brightness Temperatures and TOTs
  - Research (Instrument) Products
- What needs to improve for this year

What we planned…

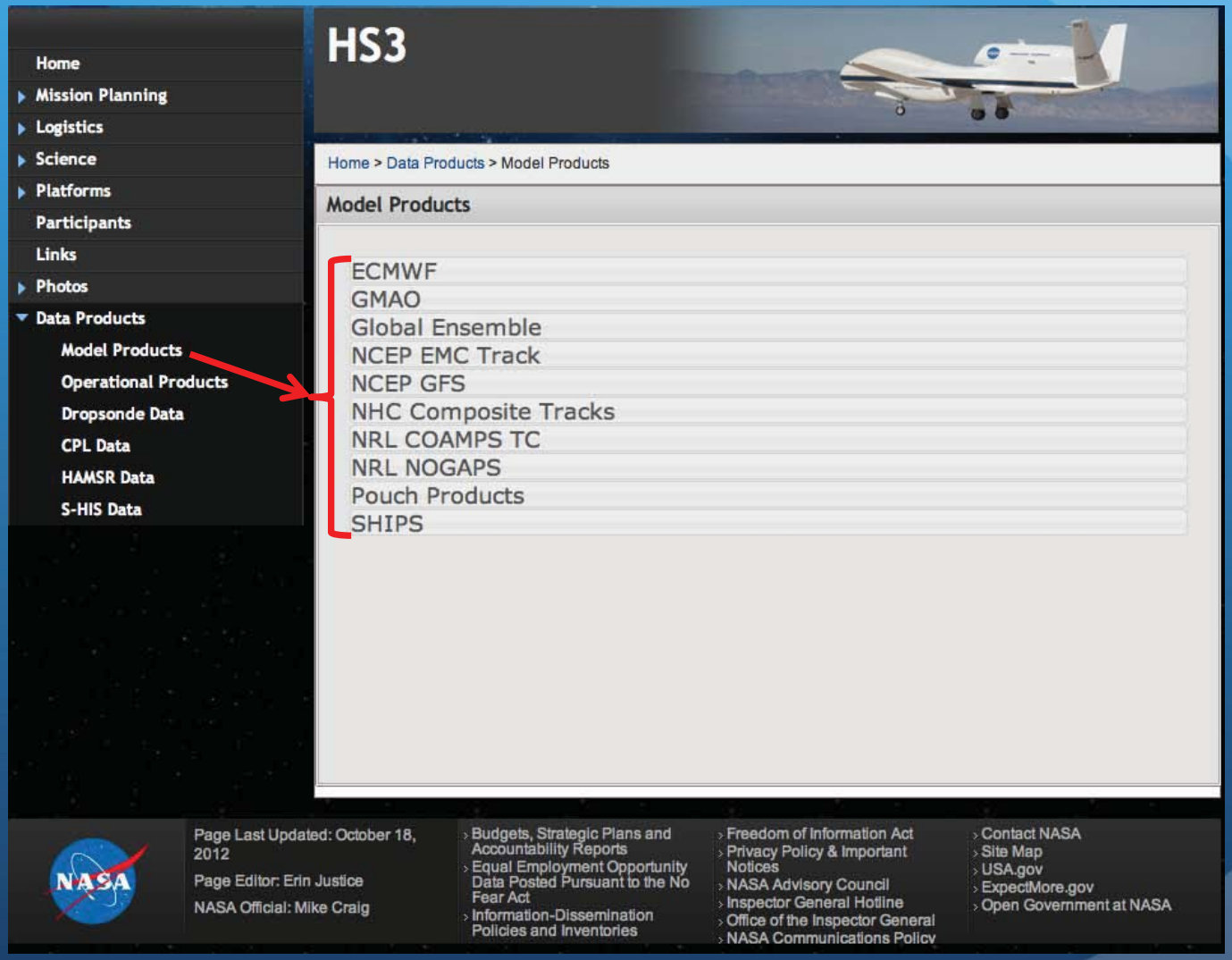
- Many items on PREDICT page are already provided on the ESPO HS3 website or through Mission Tools
- Provide archived images of Operational, Model, and Research (Instrument) Products from the ESPO HS3 website
- Ftp site housed at NASA GSFC (Emory) and front-end website administered from NASA Ames (Chirica)

What we did…

- Operational Products
- Model Products
- Research Products

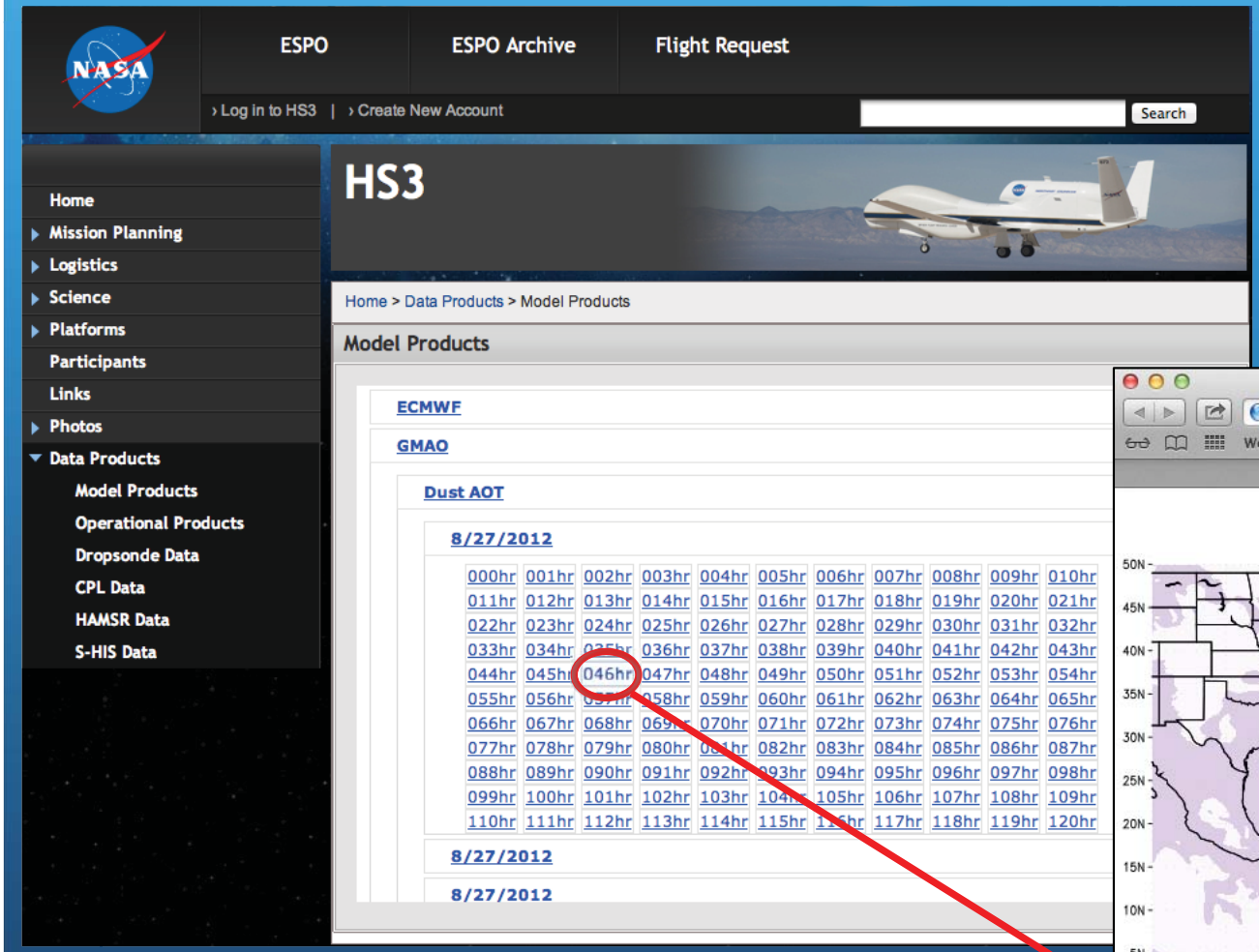


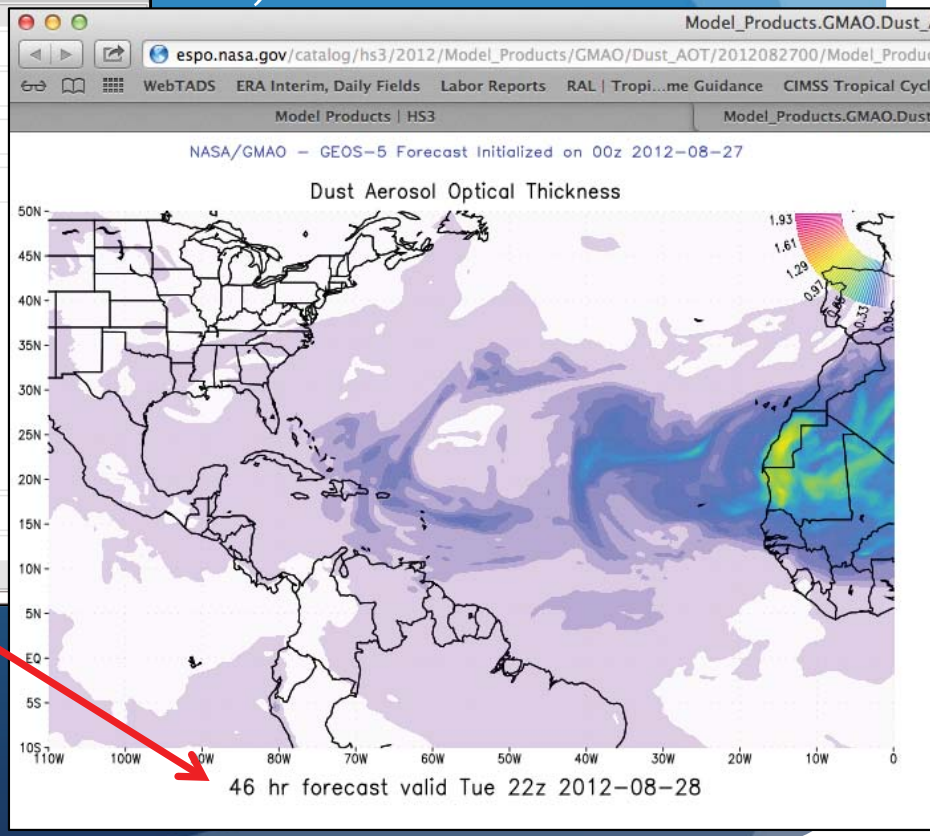
Model Products



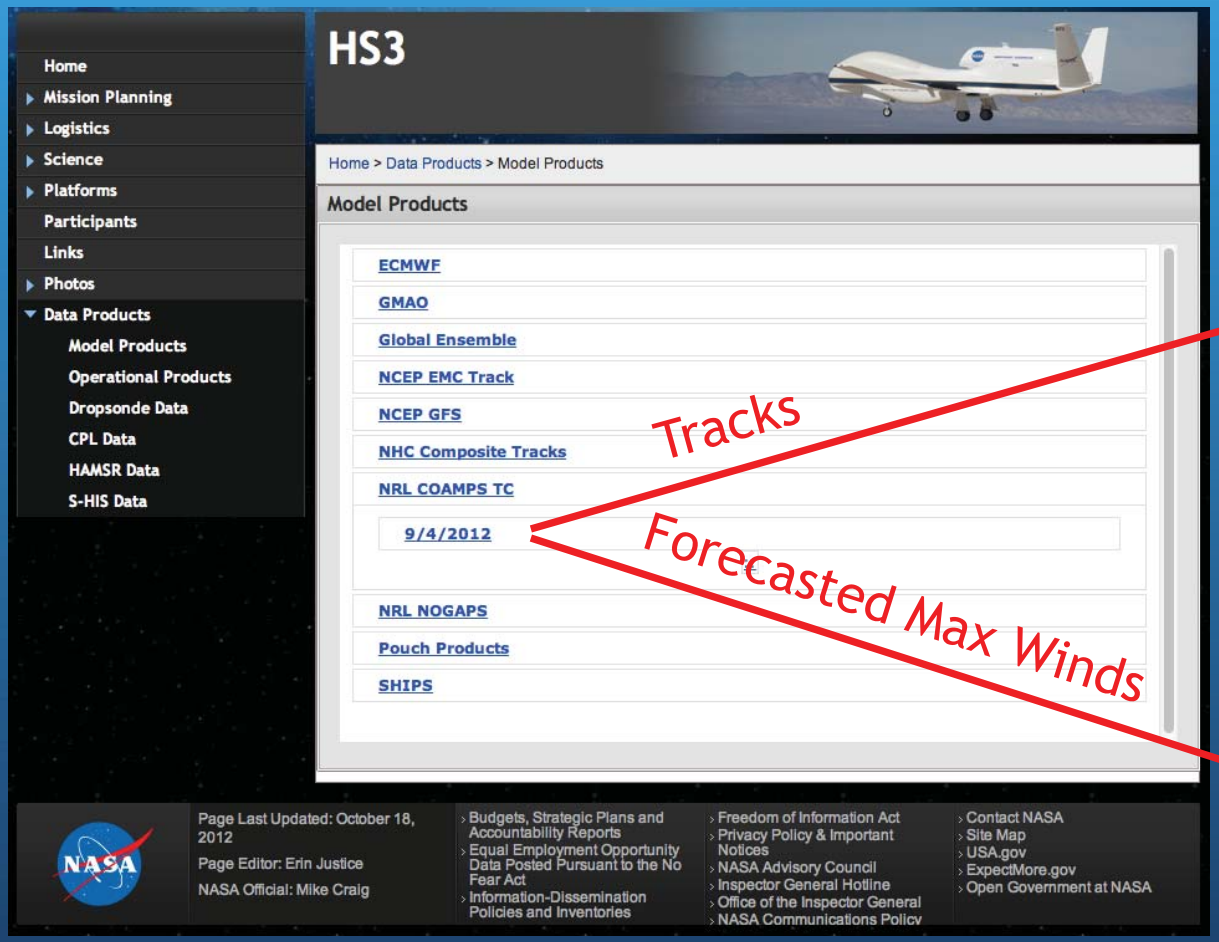
Model Products Example: GMAO Dust AOT

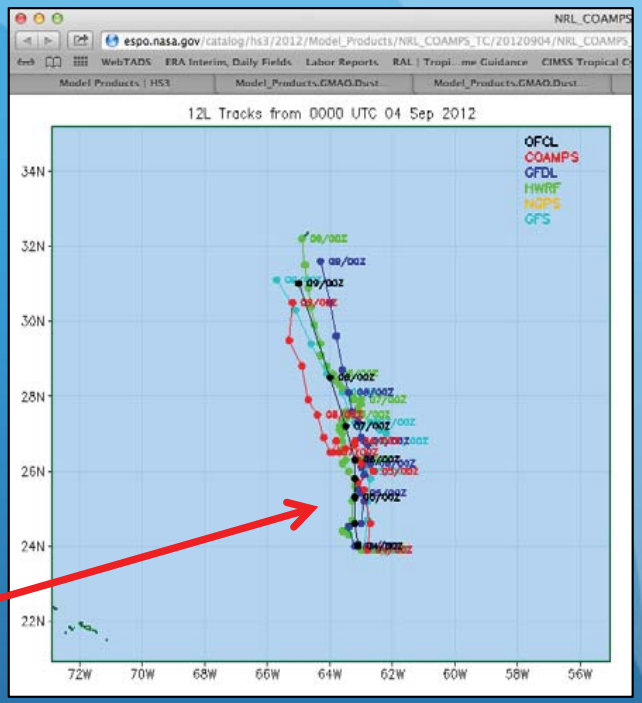
GMAO provided GEOS-5 forecasts of Dust AOT out to 120 hours initialized 4X/day (00, 06, 12, 18 UTC) from Aug. 27 – Oct. 20, 2012

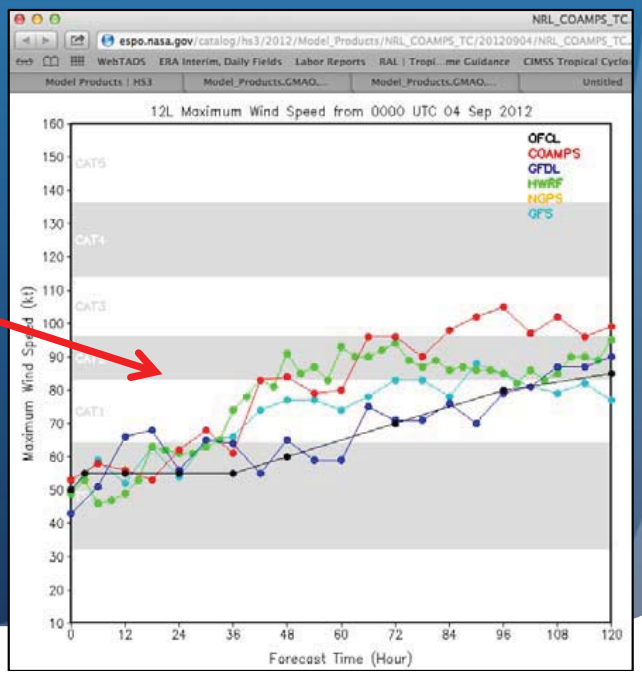




Model Products Example: NRL COAMPS TC

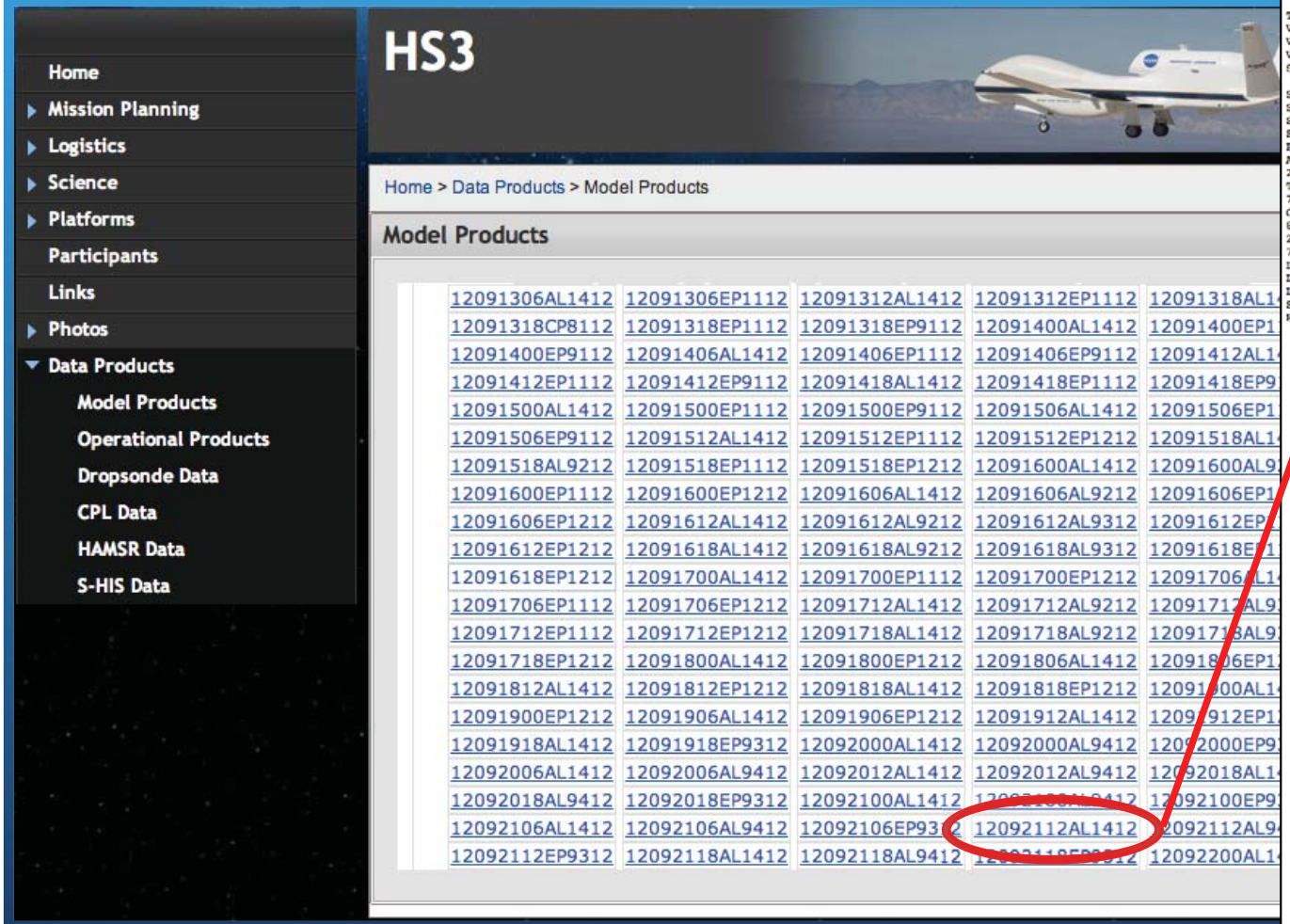






Model Products Example: SHIPS

SHIPS provided Intensity Forecast for the Eastern Pacific as well as the Atlantic




```
                *   ATLANTIC SHIPS INTENSITY FORECAST        *
                * GOES PROXY USED,       OHC AVAILABLE      *
                *      NADINE  AL142012  09/21/12  12 UTC    *

TIME (HR)         0   6  12  18  24  36  48  60  72  84  96 108 120
V (KT) NO LAND   55  55  54  52  51  49  51  51  49  47  42  42  42
V (KT) LAND      55  55  54  52  51  49  51  51  49  47  42  42  42
V (KT) LGE mod   55  55  55  55  55  55  55  55  55  55  54  52  51
Storm Type     SUBT SUBT TROP TROP TROP TROP TROP TROP TROP TROP TROP TROP TROP

SHEAR (KT)        6   9   8  16  14  26  32  27  25  32  29  32  18
SHEAR ADJ (KT)    6   0   1   4   3  -2  -2  -7  -3  -7  -2  -7  -3
SHEAR DIR        65  63  49  17 342 268 234 229 226 228 236 244 253
SST (C)        24.5 24.8 25.1 25.3 25.4 25.5 25.4 25.4 25.4 25.4 25.4 25.4 25.4
POT. INT. (KT)  100 102 104 106 106 105 104 104 103 103 103 103 104
ADJ. POT. INT.   85  87  88  89  89  87  85  85  85  85  84  84  85
200 MB T (C)   -54.1 -54.1 -54.3 -54.8 -54.6 -54.5 -55.3 -54.2 -53.9 -53.9 -54.6 -55.1 -55.4
TH_E DEV (C)     4   4   3   3   4   4   4   4   4   4   4   3   2
700-500 MB RH   32  30  28  32  30  30  26  22  26  27  26  23  22
GFS VTEX (KT)   32  30  29  29  27  26  29  30  28  27  24  25  25
850 MB ENV VOR 185 189 179 155 139 108 105 110 114 110 103  44   3
200 MB DIV     -32  -8 -35 -23 -11 -12  15  -9   9  -3 -12 -28 -26
700-850 TADV     0  -9 -10  -9 -29 -19  -6  10   8   0  -3 -20 -22
LAND (KM)     1570 1505 1436 1369 1302 1226 1209 1185 1163 1163 1185 1185 1163
LAT (DEG N)   34.7 34.1 33.5 33.1 32.7 32.5 32.6 32.6 32.5 32.5 32.6 32.6 32.5
LONG(DEG W)   27.5 27.1 26.6 26.1 25.5 24.7 24.4 24.1 23.9 23.9 24.1 24.1 23.9
STM SPEED (KT)    7   7   6   6   5   2   1   1   1   1   0   0   1
HEAT CONTENT      0   0   0   0   0   0   0   0   0   0   0   0   0

 FORECAST TRACK FROM OFCI       INITIAL HEADING/SPEED (DEG/KT):190/  6      CX,CY:   0/ -5
 T-12 MAX WIND:  55             PRESSURE OF STEERING LEVEL (MB):  613  (MEAN=623)
 GOES IR BRIGHTNESS TEMP. STD DEV.  50-200 KM RAD:  14.1 (MEAN=14.5)
 % GOES IR PIXELS WITH T < -20 C    50-200 KM RAD:  58.0 (MEAN=65.0)

                    INDIVIDUAL CONTRIBUTIONS TO INTENSITY CHANGE
                      6  12  18  24  36  48  60  72  84  96 108 120
 ----------------------------------------------------------------------
 SAMPLE MEAN CHANGE   1.  2.  3.  4.  6.  8.  9. 11. 12. 12. 13. 14.
 SST POTENTIAL       -1. -3. -4. -5. -8. -9.-10.-11.-12.-13.-14.-14.
 VERTICAL SHEAR MAG   1.  2.  3.  4.  4.  3.  1. -1. -3. -5. -7. -8.
 VERTICAL SHEAR ADJ   0.  0.  0. -1. -1.  0.  1.  1.  2.  2.  2.  2.
 VERTICAL SHEAR DIR   0. -1. -1. -2. -1.  0.  1.  3.  4.  6.  7.  8.
 PERSISTENCE          0. -1. -1. -1. -1. -1. -1. -1.  0.  0.  0.  0.
 200/250 MB TEMP.     0.  0.  1.  1.  2.  3.  4.  5.  5.  6.  8.  9.
 THETA_E EXCESS       0. -1. -2. -3. -5. -7. -9.-12.-14.-17.-19.-21.
 700-500 MB RH        0.  0.  0.  0.  1.  2.  2.  2.  3.  3.  3.  2.
 GFS VORTEX TENDENCY  0. -1. -2. -3. -6. -3. -4. -5. -6.-10. -9. -9.
 850 MB ENV VORTICITY 1.  2.  3.  4.  5.  6.  8.  9. 10. 10. 10.  9.
 200 MB DIVERGENCE    0. -1. -1. -2. -3. -3. -3. -3. -3. -3. -3. -3.
 850-700 T ADVEC      0.  0.  0.  1.  1.  1.  1.  0.  0.  0.  1.  2.
 ZONAL STORM MOTION   0.  0.  0.  0. -1. -1. -1. -2. -2. -3. -3. -3.
 STEERING LEVEL PRES  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
 DAYS FROM CLIM. PEAK 0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
 GOES PREDICTORS      0.  0.  0. -1. -1. -1. -1. -1. -1. -1. -1. -1.
 OCEAN HEAT CONTENT   0.  0.  0.  0.  0. -1. -1. -1. -1. -1. -1. -1.
 ----------------------------------------------------------------------
 TOTAL CHANGE         0. -1. -2. -4. -6. -4. -4. -6. -8.-13.-13.-13.

  ** 2011 ATLANTIC RI INDEX AL142012     NADINE 09/21/12  12 UTC **

12 HR PERSISTENCE (KT):   0.0 Range:-45.0 to  30.0 Scaled/Wgted Val:  0.6/  2.0
850-200 MB SHEAR (KT) :  10.2 Range: 26.2 to   3.2 Scaled/Wgted Val:  0.7/  1.3
STD DEV OF IR BR TEMP : 999.0 Range: 34.1 to   3.2 Scaled/Wgted Val:999.0/999.0
D200 (10**7s-1)       : -21.8 Range:-21.0 to 165.0 Scaled/Wgted Val:  0.0/  0.0
POT = MPI-VMAX (KT)   :  32.8 Range: 33.8 to 126.5 Scaled/Wgted Val:  0.0/  0.0
850-700 MB REL HUM (%):  55.0 Range: 56.0 to  85.0 Scaled/Wgted Val:  0.0/  0.0
Heat content (KJ/cm2) :   0.0 Range:  0.0 to 130.0 Scaled/Wgted Val:  0.0/  0.0
% area w/pixels <-30 C: 999.0 Range: 17.0 to 100.0 Scaled/Wgted Val:999.0/999.0

Prob of RI for 25 kt RI threshold=   999% is 999.0 times the sample mean(12.8%)
Prob of RI for 30 kt RI threshold=   999% is 999.0 times the sample mean( 8.4%)
Prob of RI for 35 kt RI threshold=   999% is 999.0 times the sample mean( 5.0%)
Prob of RI for 40 kt RI threshold=   999% is 999.0 times the sample mean( 3.4%)

** PROBLTY OF AT LEAST 1 SCNDRY EYEWL FORMTN EVENT AL142012     NADINE 09/21/2012  12 UTC **
TIME(HR)   0-12  12-24(0-24)  24-36(0-36)  36-48(0-48)
CLIMO(%)     0      0(  0)       0(  0)       0(  0)     <-- PROB BASED ON INTENSITY ONLY
PROB(%)      0      0(  0)       0(  0)       0(  0)     PC4 UNAVAIL...MODEL SKILL DEGRADED
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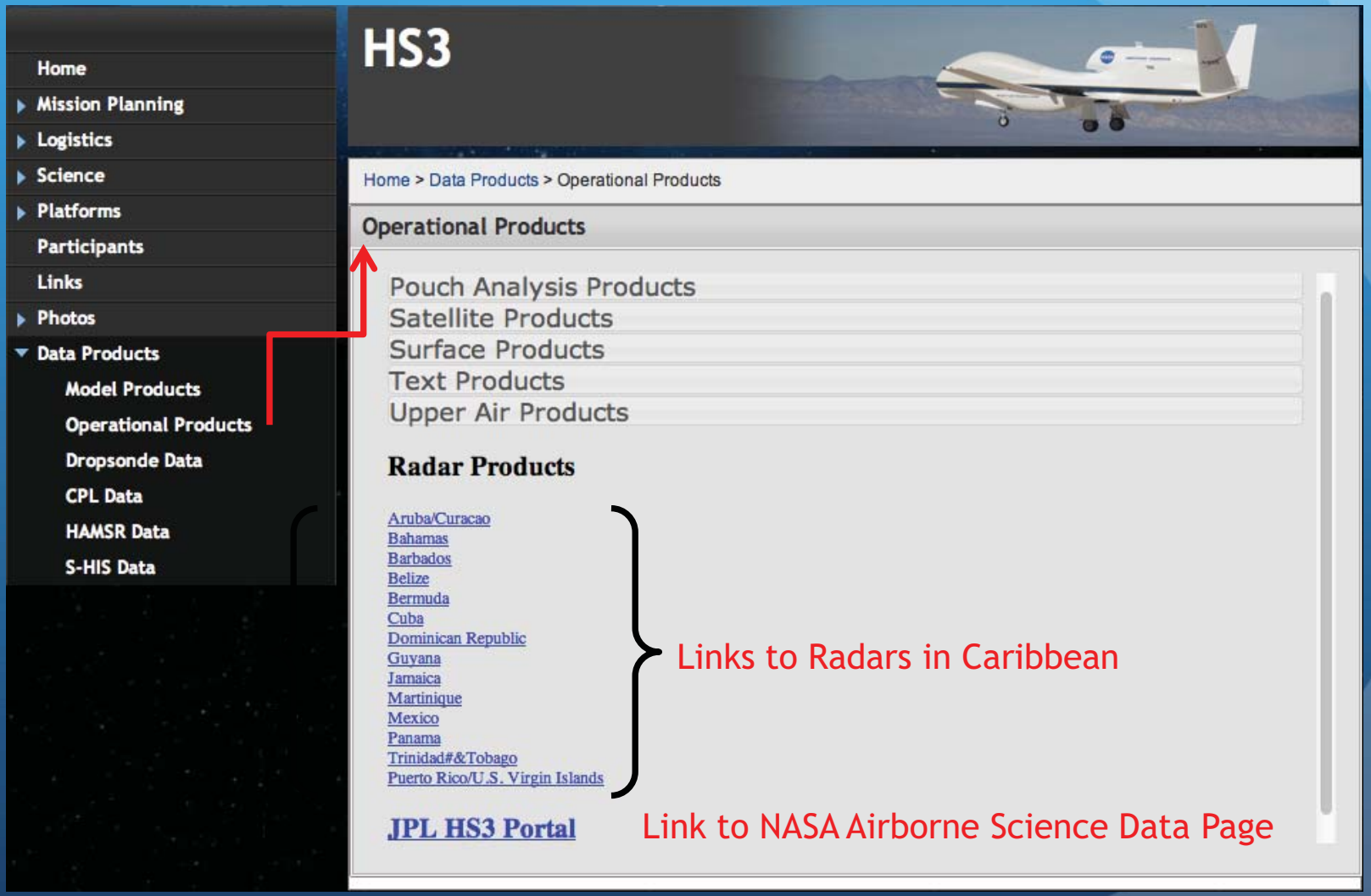
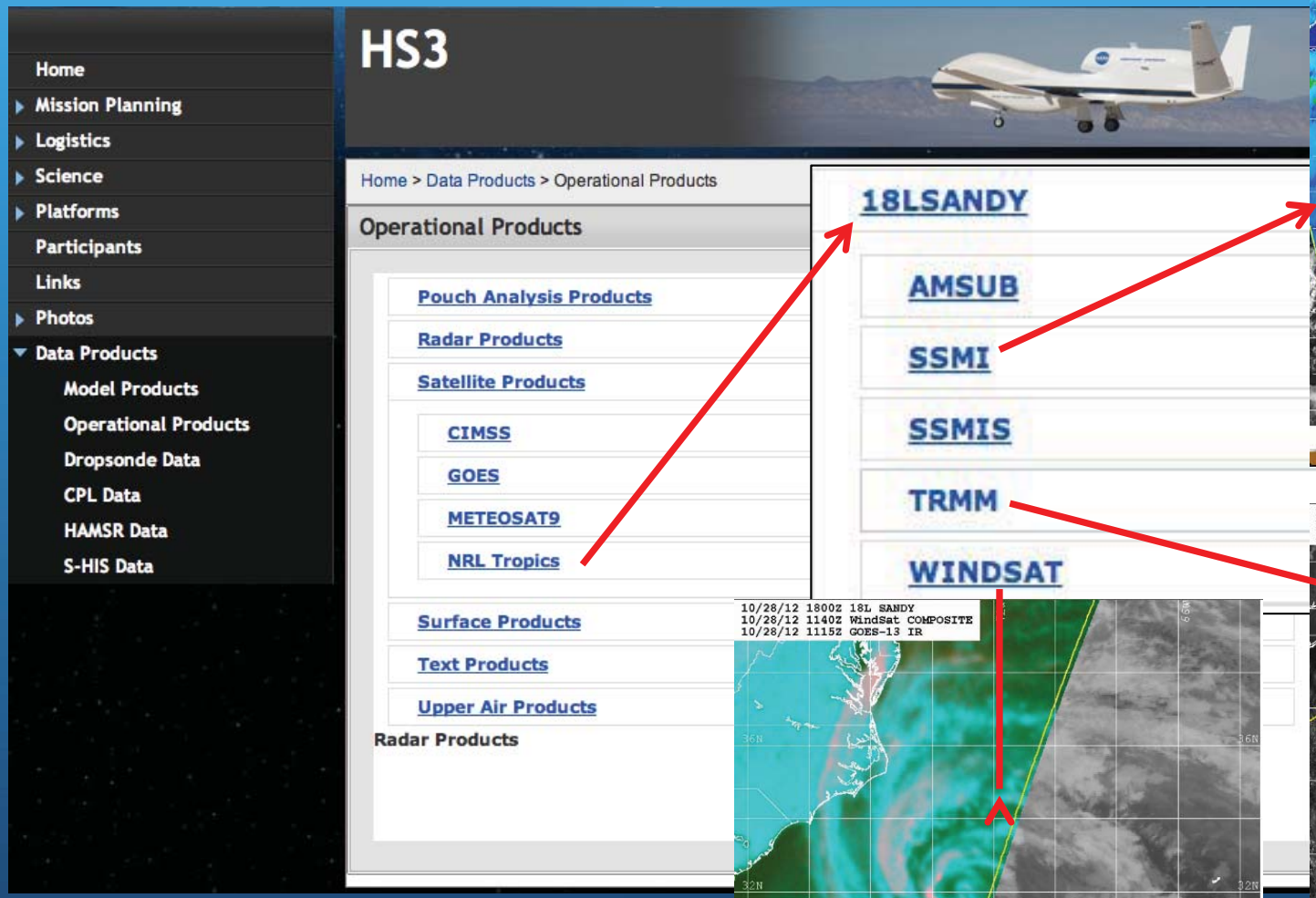
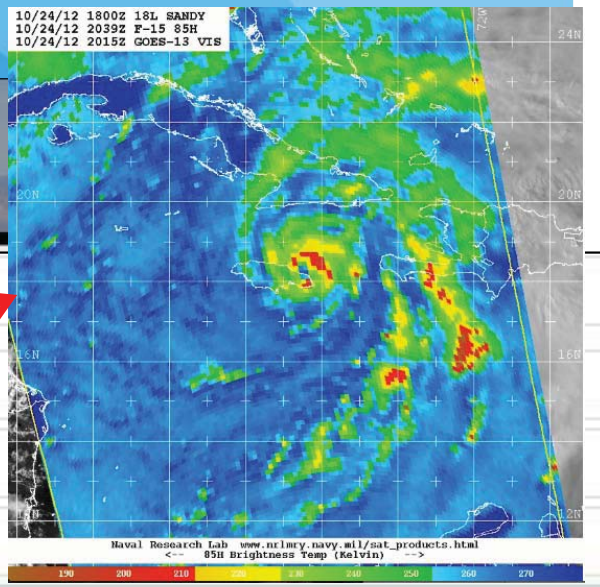
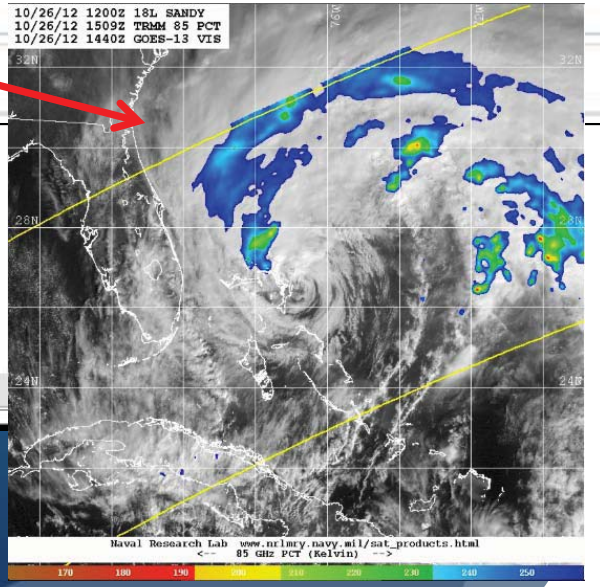
Operational Products



Operational Products Example: NRL Tropics

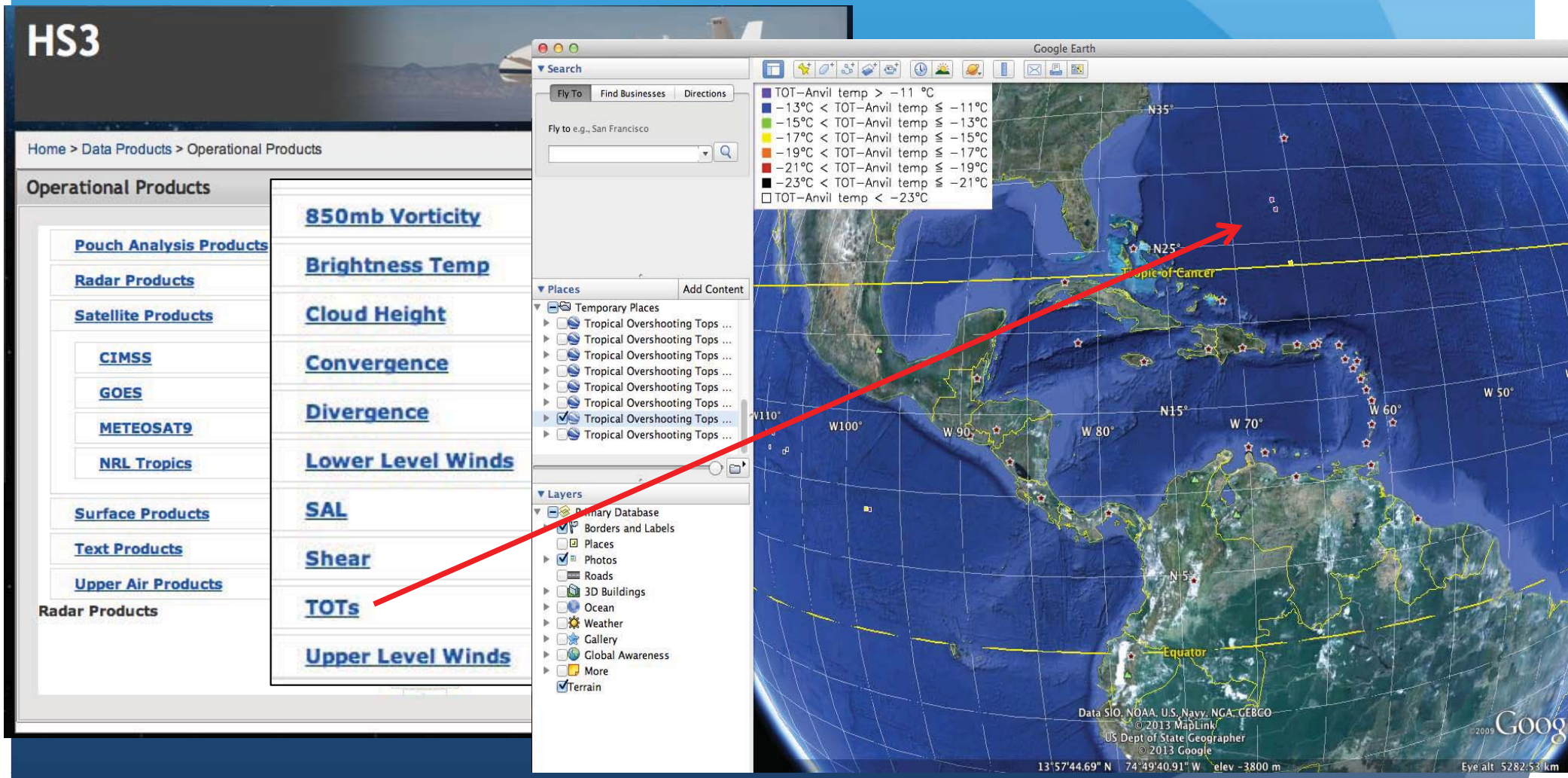




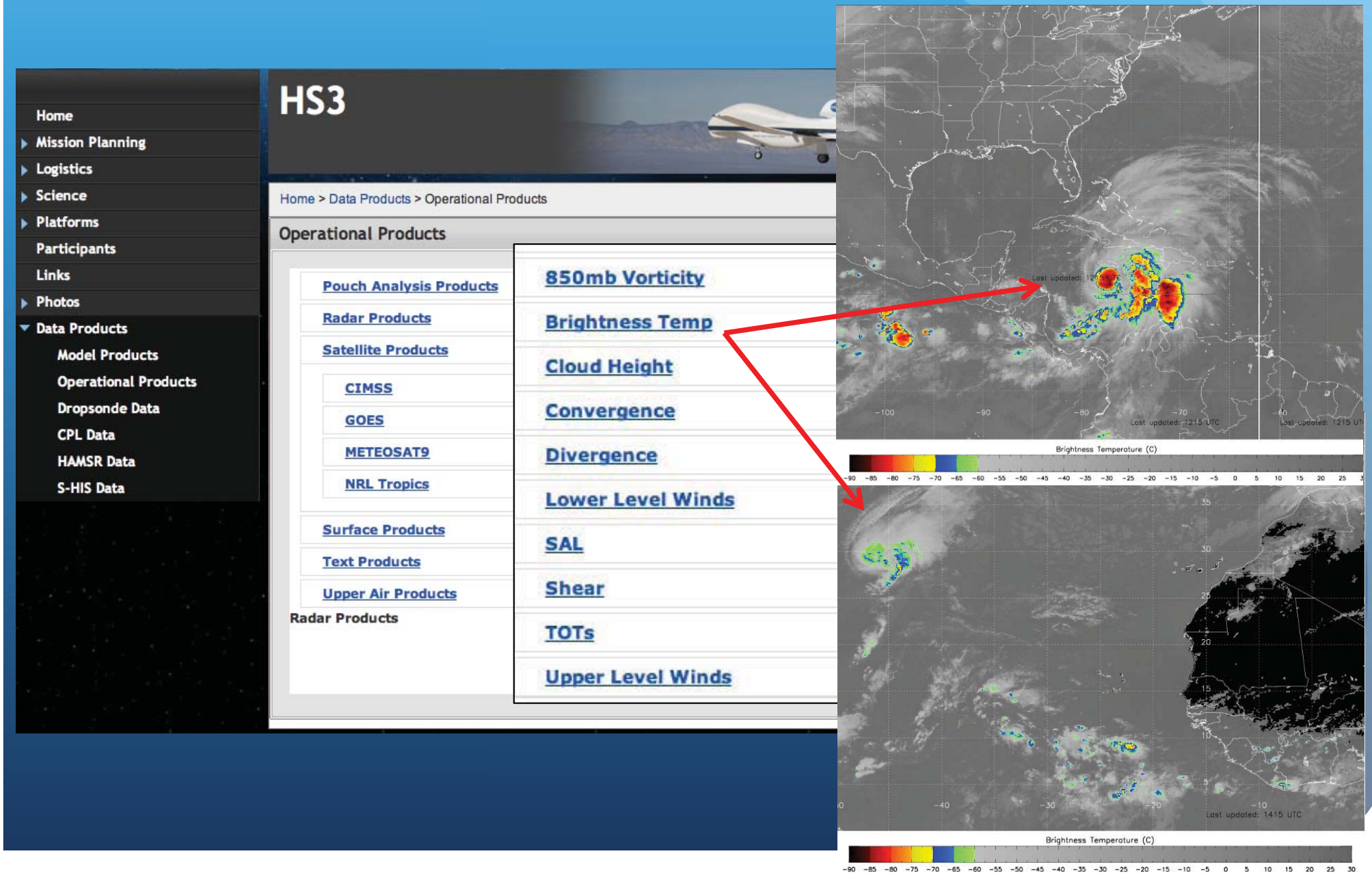


Organized by invest, disturbance, or tropical storm/hurricane name

Operational Products Example: CIMSS Tropical Overshooting Tops



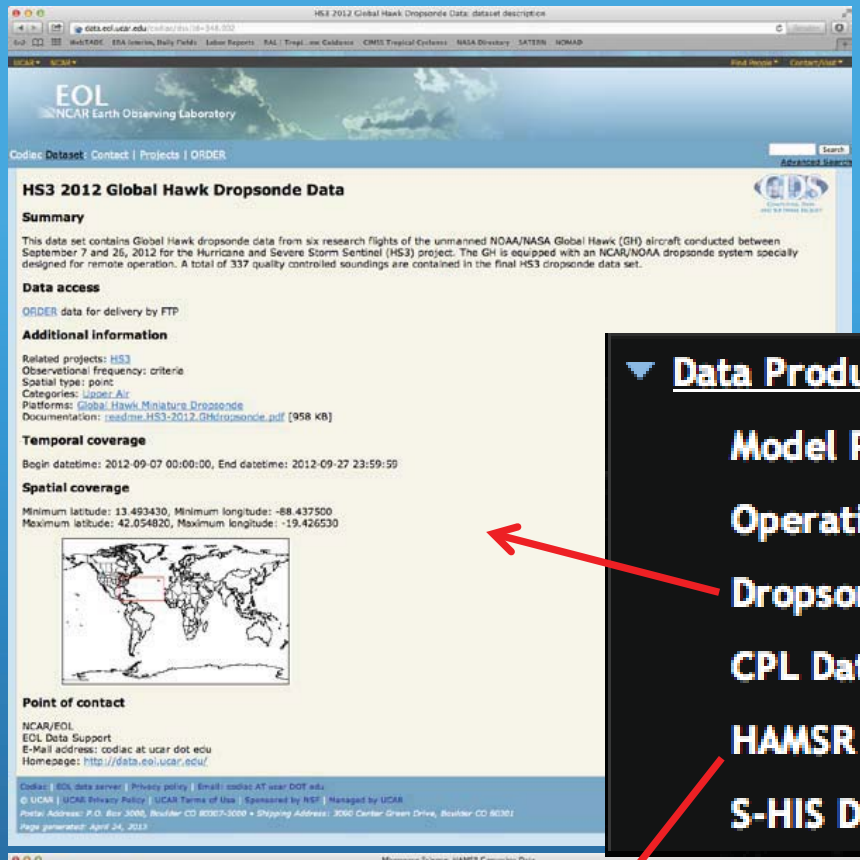
Operational Products Example: CIMSS Brightness Temperatures

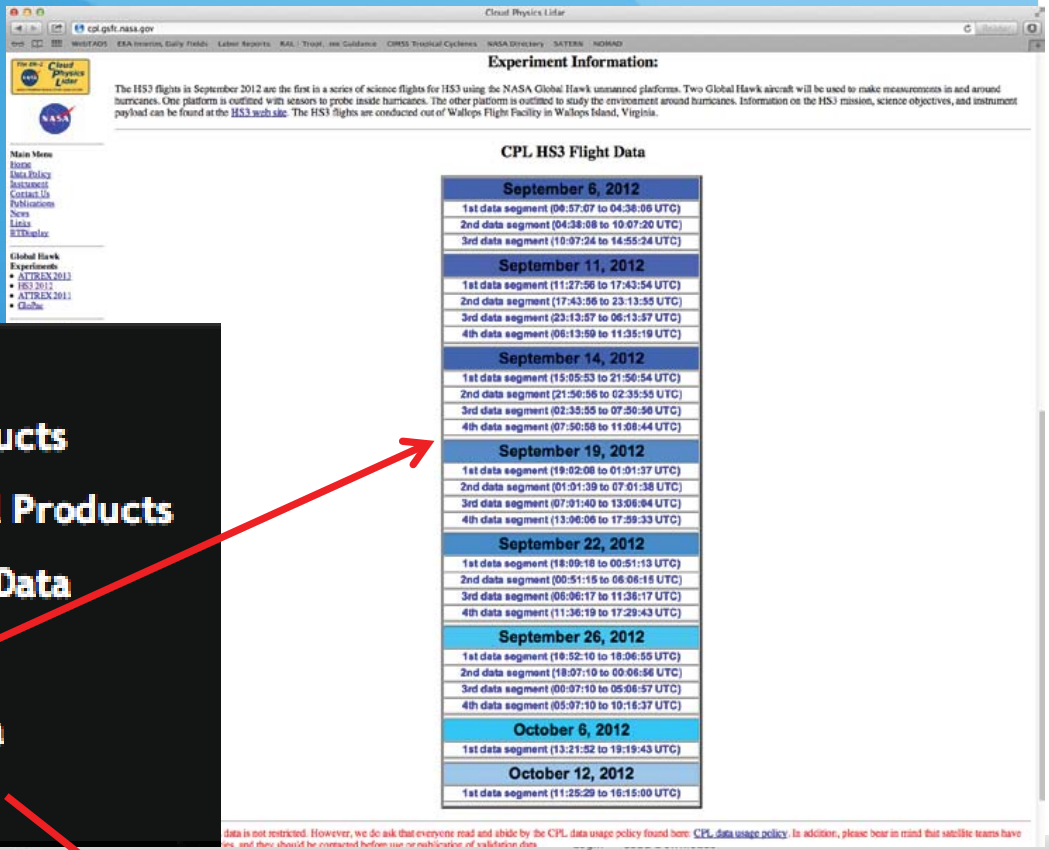


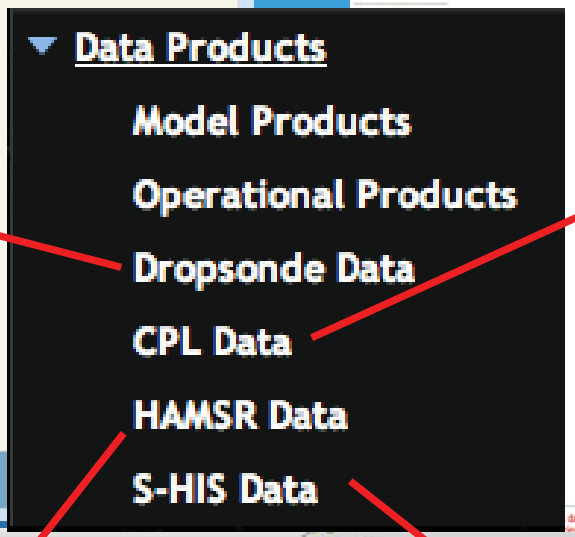
Research Products

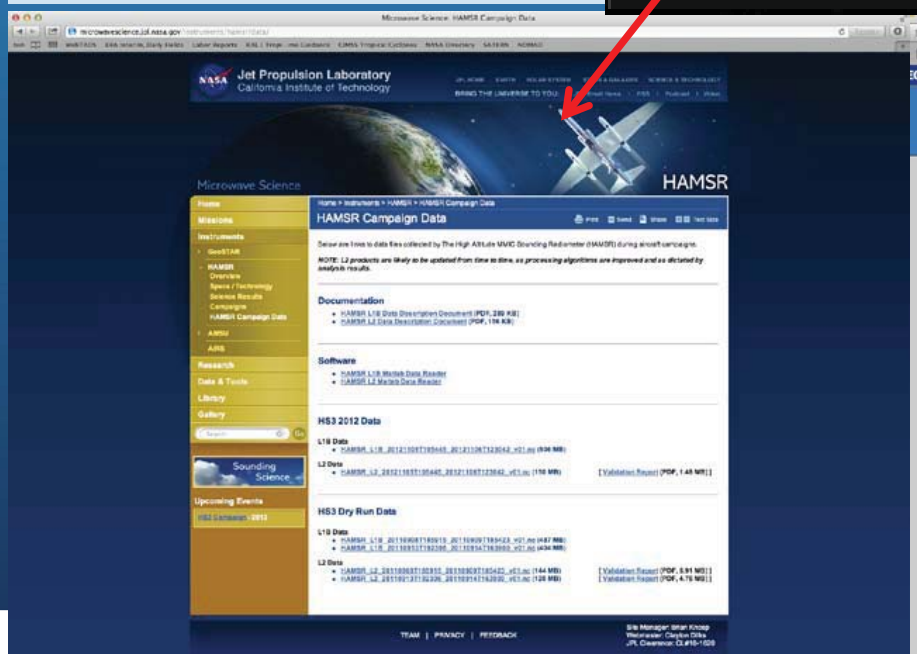
Links provided to individual instrument pages:

- Gave PI's more control over how to distribute Quicklooks and data
- Also provided solution for limited storage for ftp site hosted at GSFC


EOL
NCAR Earth Observing Laboratory
HS3 2012 Global Hawk Dropsonde Data
Summary
Data access
Additional information
Temporal coverage
Spatial coverage
Point of contact


Experiment Information:
CPL HS3 Flight Data
September 6, 2012
September 11, 2012
September 14, 2012
September 19, 2012
September 22, 2012
September 26, 2012
October 6, 2012
October 12, 2012


Data Products
Model Products
Operational Products
Dropsonde Data
CPL Data
HAMSR Data
S-HIS Data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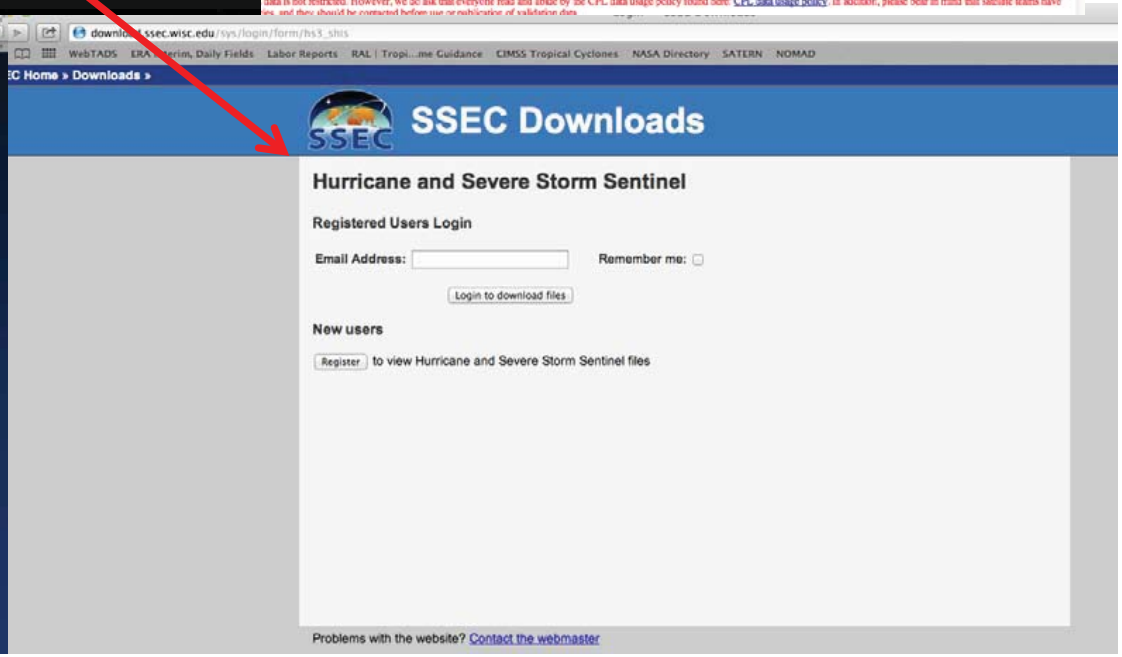
California Institute of Technology
Microwave Science
HAMSR
HAMSR Campaign Data


SSEC Downloads
Hurricane and Severe Storm Sentinel
Registered Users Login
Email Address:
Remember me:
Login to download files
New users
Register to view Hurricane and Severe Storm Sentinel files
Problems with the website? Contact the webmaster

What needs to happen to improve this year…

- Better communication with forecast team to provide/archive products that are used on a daily basis
- Archive of ground-based radar products
- Add in HIRAD and HIWRAP links when ready
- Add in NOAA products:
  - NHC Aircraft Reconnaissance Plan of the Day (link)
  - NOAA HRD Updates
  - AOML SST analysis, TC Heat Potential
  - OPC Surface Analysis

What needs to happen to improve this year…

"Many hands make light work." – *John Heywood*

If you have products to share, let us know. The process to get products to us is very easy:

1.) Open a terminal window: ftp meso.gsfc.nasa.gov

2.) Enter "hs3" when prompted for name.

3.) Enter password when prompted.

At the 2012 meeting, there was lots of demand for a PREDICT-like page for HS3. We have the architecture in place, but need contributions from the team!

Questions???
Comments???
Suggestions???